## CLAIMS

What is claimed is:

1.     Apparatus for intelligently redirecting data traffic from a Public Switched Telephone Network (PSTN) to a data network, the apparatus comprising:

an intelligent communications platform connected between a switch and a Signaling System 7 (SS7) network to intercept SS7 messages between the switch and the SS7 network; and

a communications control module connected to the intelligent communications platform via a Transmission Control Protocol/Internet Protocol (TCP/IP) link, the communications control module for providing management and communications to the ICP and providing access to the management and communication for a plurality of subscribers.

2.     The apparatus of claim 1 wherein the ICP includes:
an SS7 I/O card for processing SS7 messages; and
a CPU card for processing ISUP and TCAP.

3.     The apparatus of claim 1 wherein the communications control module includes:
instructions for receiving messages from other ICPs for updated information on congestion on certain routes.

4.     The apparatus of claim 1 wherein the communications control module includes:
instructions for receiving messages from other ICPs for updated information on congestion on certain routes.

1      5.     The apparatus of claim 1 wherein the communications control

2   module includes:

3       instructions for the plurality of subscribers to enter respective access

4   line availability, alternative access numbers; and

5       instructions for a plurality of users to populate respective user profiles.


1      6.     The apparatus of claim 1 wherein the GUI allows internet service

2   providers (ISP) to update information on status of a plurality of modem banks

3   within the ISP.


1      7.     The apparatus of claim 1 wherein the GUI allows a network

2   engineer to view traffic congestion and redirect traffic if necessary.


1      8.     A system for intelligently redirecting data traffic from a Public

2   Switched Telephone Network (PSTN) to a data network, the system

3   comprising:

4       instructions for an intelligent communications platform connected

5   between a switch and a Signaling System 7 (SS7) network to intercept SS7

6   messages between the switch and the SS7 network; and

7       instructions for a communications control module connected to the

8   intelligent communications platform via a Transmission Control

9   Protocol/Internet Protocol (TCP/IP) link to provide management and

10   communications to the ICP and to provide access to the management and

11   communication for a plurality of subscribers.


1      9.     The system of claim 8 further including:

2       instructions for an SS7 I/O card to process SS7 messages; and

3       instructions for a CPU card to process ISUP and TCAP.

1        10.    The system of claim 8 further including instructions for receiving

2    messages from other ICPs for updated information on congestion on certain

3    routes.

1        11.    The system of claim 8 further including instructions for receiving

2    messages from other ICPs for updated information on congestion on certain

3    routes.

1        12.    The system of claim 8 further including:

2    instructions for the plurality of subscribers to enter respective access

3    line availability, alternative access numbers; and

4    instructions for a plurality of users to populate respective user profiles.

1        13.    The system of claim 8 further including instructions for the GUI

2    to allow internet service providers (ISP) to update information on status of a

3    plurality of modem banks within the ISP.

1        14.    The system of claim 8 further including instructions for the GUI

2    to allow a network engineer to view traffic congestion and redirect traffic if

3    necessary.

1    15.    A method for intelligently redirecting data traffic from a Public

2    Switched Telephone Network (PSTN) to a data network, the method

3    comprising:

4          intercepting Signaling System 7 (SS7) messages by an intelligent

5    communications platform connected between a switch and a Signaling System

6    7 (SS7) network, wherein the SS7 messages are from the switch and to the SS7

7    network;

8          providing management and communications control from a

9    communications control module connected to the intelligent communications

10   platform via a Transmission Control Protocol/Internet Protocol (TCP/IP) link;

11   and

12         providing access to the communications control module to a plurality of

13   subscribers.

1    16.    The method of claim 15 further including:

2    processing SS7 messages with an SS7 I/O card; and

3    processing ISUP and TCAP messages with a CPU card.

1    17.    The method of claim 15 further including receiving messages

2    from other ICPs for updated information on congestion on certain routes.

1    18.    The method of claim 15 further including receiving messages

2    from other ICPs for updated information on congestion on certain routes.

1         19.    The method of claim 15 further including:

2         providing the ability for the plurality of subscribers to enter respective

3   access line availability, alternative access numbers; and

4         providing the ability for a plurality of users to populate respective user

5   profiles.

1         20.    The method of claim 15 further including providing the ability for

2   the GUI to allow internet service providers (ISP) to update information on

3   status of a plurality of modem banks within the ISP.

1         21.    The method of claim 8 further including providing the ability for

2   the GUI to allow a network engineer to view traffic congestion and redirect

3   traffic if necessary.